

CLAIMS

What is claimed is:

- 1 1. A method, comprising accommodating within a common communication channel having
2 designated transmission time slots for various devices of a computer network transmissions
3 within the channel outside of a device's designated time slot through the use of a clear
4 channel assessment time.
- 1 2. The method of claim 1 wherein the clear channel assessment time takes into account the
2 device's designated transmission time slot within the communication channel with respect
3 to those of other network devices.
- 1 3. The method of claim 2 wherein the clear channel assessment time comprises a time
2 period that is the product of a predetermined clear channel waiting time and a numerical
3 representation of the difference between the device's designated transmission time slot
4 within the communication channel and that of another network device that completed a
5 preceding transmission.
- 1 4. The method of claim 3 wherein the clear channel waiting time is specified by a network
2 master device as part of a network connection process.
- 1 5. The method of claim 1 wherein the transmissions within the channel outside of a
2 device's designated time slot are accommodated after all regularly scheduled transmissions
3 within the channel during a network frame period have been completed.

6. A method, comprising maintaining a clear channel assessment that takes into account a first device's designated transmission time slot within a communication channel with respect to those of other network devices in order to determine idle times that exist after completion of regularly scheduled transmissions within the communication channel.

7. The method of claim 6 wherein the first device transmits within the common communication channel upon an indication that the channel is available for transmission.

8. The method of claim 7 wherein the indication is made upon the expiration of a time period that is the product of a predetermined clear channel waiting time and a numerical representation of the difference between the first device's designated transmission time slot within the communication channel with respect to that of another network device.

9. The method of claim 8 wherein the predetermined clear channel waiting time is designated by a network master device upon a connection thereto by the first device.

10. A network client comprising a clear channel assessment indicator and configured to transmit within a communication channel of a computer network at a time determined in part by a notification from the clear channel assessment indicator and in part by transmission characteristics of other devices transmitting within the channel.

11. The network client of claim 10 wherein the transmission characteristics comprise a numerical difference between a designated transmission slot for the network client and that of at least one of the other devices.

12. The network client of claim 10 wherein the channel is a time division multiplexed wireless communication channel.

1 13. A method comprising negotiating a transmission time in a time division multiplexed
2 communication channel independent of a need to transmit asynchronous data within idle
3 times of a transmission frame period.

1 14. The method of claim 13 wherein transmissions of asynchronous data within the idle
2 times are scheduled by devices utilizing the communication channel according to a clear
3 channel assessment time and transmission characteristics of other devices transmitting
4 within the channel.

1 15. The method of claim 14 wherein the transmission characteristics comprise designated
2 transmission time slots within the transmission frame period.

1 16. A method comprising accommodating asynchronous data transmissions within a
2 synchronized network in which inter-node communications are organized into frames of
3 time periods by permitting such asynchronous communications within otherwise idle times
4 within the frames.

1 17. The method of claim 16 wherein use of the otherwise idle times within the frames takes
2 into account a transmitting node's designated transmission time within a particular frame
3 with respect to transmission times of other nodes of the network.

1 18. The method of claim 16 wherein the asynchronous data transmissions are self-
2 organized and/or self-synchronized by nodes of the network without direct scheduling
3 assistance from a network master.